

## CLAIMS

1. An intervertebral implant for the lumbo-sacral joint, characterized in that it consists in a spacer (20, 120) suitable for being placed between the fifth lumbar  
5 vertebra (L5) and the sacral vertebra (S1) articulated thereto, the body of said spacer (21, 121) presenting opposite top and bottom end faces (22, 122; 24, 124), in that a groove (30, 130) extending along the midplane (M, M') of the spacer (20, 120) is formed in the top end face  
10 (22, 122) and is suitable for receiving the spinous process (10) of said lumbar vertebra (L5), and in that a longitudinal housing (36, 136) extending orthogonally to said groove (30, 130) is formed in the bottom end face (24, 124) and is suitable for receiving the top portion  
15 (14) of the sacral vertebra (S1) in such a manner that said spacer (20, 120) rests directly on said top portion (14).
2. An implant according to claim 1, characterized in that  
20 the body of said spacer presents first and second opposite side faces (26, 126; 28, 128) into which said groove (30, 130) opens out, and presents at its bottom end an extension (32, 132) having a first side (32b, 132b) extending the first side face (26, 126), and a  
25 second side (32a, 132a) that is opposite from its first side and that defines a setback relative to the second side face (28, 128) of the body of the spacer, and in that the spacer (20, 120) includes a tab (34, 134) of width narrower than the width of the body (21, 121) of  
30 the spacer in the direction orthogonal to the midplane (M, M') of the spacer, connected to the body of the spacer, and extending facing the second side (32a, 132a) of said extension (32, 132) in such a manner that the inside face (34a, 134a) of said tab (34, 134) facing the  
35 second side of the extension co-operates with said second side to define the outline of said housing (36, 136).

3. An implant according to claim 1 or claim 2,  
characterized in that the section of said housing (36,  
136) in the midplane (M, M') of the spacer is generally  
U-shaped, and in that the midplane (L, L') of said  
5 housing is not orthogonal to the midplane (F, F') defined  
by the bottom of said groove (30, 130).
4. An implant according to claim 3, characterized in that  
the midplane (L, L') of said housing (36, 136) is  
10 inclined relative to the midplane (F, F') defined by the  
bottom of said groove (30, 130) by an angle lying in the  
range 40° to 80°.
5. An implant according to claim 2, and any preceding  
15 claim, characterized in that the inside face (34a, 134a)  
of said tab (34, 134) is convex.
6. An implant according to claim 2, and any preceding  
claim, characterized in that a zone of the inside face  
20 (34a, 134a) of the tab is inclined relative to the  
midplane (F, F') defined by the bottom of said groove  
(30, 130) by an angle A lying in the range 60° to 80°.
7. An implant according to claim 6, characterized in that  
25 the angle A is substantially equal to 70°.
8. An implant according to claim 2, and any preceding  
claim, characterized in that a portion of the second side  
(32a, 132a) of the extension is inclined relative to the  
30 midplane (F, F') defined by the bottom of said groove  
(30, 130) at an angle B lying in the range 40° to 70°.
9. An implant according to claim 8, characterized in that  
the angle B lies in the range 50° to 60°.
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10. An implant according to claim 2, and any preceding claim, characterized in that a notch is formed in said extension (132) facing said tab (134).

5 11. An implant according to any preceding claim, characterized in that the spacer (20, 120) further comprises first fastener means (42, 142) for fastening the body (21, 121) of the spacer to said spinous process (10) of the lumbar vertebra (L5).

10 12. An implant according to any preceding claim, characterized in that the spacer (20) further comprises second fastener means (44) for fastening the body (21, 121) of the spacer to said sacral vertebra (S1).

15 13. An implant according to claim 11 or claim 12, characterized in that said fastener means (42, 44, 142) comprise a strap (46, 46', 146) and a fastener system secured to the body (21, 121) of said spacer.

20 14. An implant according to claim 13, characterized in that a hole (38) is formed in the body (21) of said spacer and opens out into the bottom of said housing (36) in the vicinity of said tab (34), and is suitable for  
25 receiving a portion of a strap (46).